

Title (en)
Electric hammer

Title (de)
Elektrischer Hammer

Title (fr)
Marteau électrique

Publication
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Application
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Abstract (en)
It is, accordingly, an object of the present invention to provide an electric hammer with improved construction, while ensuring the vibration reduction performance. According to the present invention, a representative electric hammer (100;101) may include a hammer bit (129), a driving motor (121), a crank mechanism (123) and a counter weight (201). The crank mechanism drives a striker (128) by converting a rotating output of the driving motor to linear motion in the axial direction of the hammer bit. The counter weight is detachably mounted to the crank mechanism and serves to reduce vibration of the striker. According to the representative hammer, because the counter weight is detachably mounted to the crank mechanism, it is possible to switch between the mode in which the counter weight is mounted on the hammer body in order to reduce and alleviate vibration and the mode in which the counter weight is removed from the hammer so that the operation can be performed with the hammer having a lighter weight and slimmer appearance. Thus, utility of the electric hammer can be improved. <IMAGE>

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Citation (search report)

- [DXY] JP S516583 U 19760117
- [Y] FR 2237734 A1 19750214 - INST NAL RECH SECURITE [FR]
- [A] GB 2053768 A 19810211 - FOSROC INTERNATIONAL LTD
- [A] US 3642077 A 19720215 - BAYARD BO SVEN
- [A] US 4478293 A 19841023 - WEILENMANN WALTER [LI], et al
- [A] EP 0035984 A1 19810916 - HOLZMANN SIV ANNA ELEONORA [SE]
- [A] GB 2129733 A 19840523 - WALTON JEAN
- [A] DE 10052447 A1 20020502 - HILTI AG [LI]

Cited by
US7604071B2; EP1832394A1; GB2476368A; EP2100698A3; CN102655990A; GB2429675A; EP1736283A3; EP2017040A1; EP1637289A1; EP1870209A4; CN102066056A; EP2174754A4; FR2991897A1; US8267191B2; US8668026B2; US8196674B2; US10071468B2; DE102009044938A1; WO2011035955A1; US7451833B2; DE102007060636A1; US7712547B2; DE102009044941A1; WO2011035956A1; DE102009044934A1; WO2011035954A1; US8261851B2; US7513317B2

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